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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/542,994

07/20/2005

Matthew M Deangelis

20030096

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22500

7590

05/30/2006

BAE SYSTEMS INFORMATION AND  
ELECTRONIC SYSTEMS INTEGRATION INC.  
65 SPIT BROOK ROAD  
P.O. BOX 868 NHQ1-719  
NASHUA, NH 03061-0868

EXAMINER

LOBO, IAN J

ART UNIT

PAPER NUMBER

3662

DATE MAILED: 05/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/542,994	<b>Applicant(s)</b> DEANGELIS ET AL.	
	<b>Examiner</b> Ian J. Lobo	<b>Art Unit</b> 3662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) 1-6 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 7-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                                                              |                                                                                         |
|----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                                                  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                                         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>7/20/05</u> . | 6) <input type="checkbox"/> Other: ____.                                                |

**DETAILED ACTION**

***Election/Restrictions***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-6, drawn to a method for manufacturing an underwater acoustic projector, classified in class 29, subclass 594.
  - II. Claims 7-15, drawn to an acoustic projector, classified in class 367, subclass 159.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions of Group I and Group II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make another and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the process for making can be used to make another and materially different product such as a downhole borehole acoustic source. The acoustic projector can be made by hand.
3. Because these inventions are independent or distinct for the reasons given above and have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper.

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4. Because these inventions are independent or distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

5. During a telephone conversation with Mr. Long on May 23, 2006 a provisional election was made without traverse to prosecute the invention of Group II, claims 7-15. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1-6 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

6. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

### ***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1, 5, 7, 11, 12, 13 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Kazmar ('518).

9. Claims 1, 5, 7, 11, 12, 13, 14 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Flanagan et al ('538).

Per claim 7, Kazmar discloses a marine projector that in Fig. 4, shows at least one cylindrical shell segment (202) and an even number of spaced drivers (204) mounted within the shell segment.

Per claim 7, Flanagan et al discloses a marine projector that in Fig. 1, shows at least one cylindrical shell segment (12) and an even number of spaced drivers (16) mounted within the shell segment.

Per claims 1, 11 and 12, see the slot (14) in Flanagan et al or slot (208) in Kazmar.

Per claims 5 and 13, see col. 9, lines 16-19 of Kazmar and Flanagan et al, col. 4, line 6.

Per claim 14, see Kazmar, Fig. 4 and Flanagan et al, Fig. 2.

Per claim 15, see Flanagan et al, element (23).

10. Claims 7 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by the patent to Kompanek ('044).

Per claim 7, Kompanek discloses a marine projector that in Figure 1 shows at least one cylindrical shell segment (10) and an even number of spaced drivers (16) mounted within the shell segment.

Per claim 8, see Fig. 5.

***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kazmar or Flanagan et al in view of Osborn et al ('222).

It is pointed out that the patent to Osborn et al on col. 4, lines 24+, teaches that shell materials may often include any one of aluminum, epoxy/graphite composites, glass fiber/epoxy composites, steel, titanium, etc. To have modified either Kazmar's or Flanagan et al's shell material by substituting a graphite epoxy composite material for aluminum or steel would have been obvious to one of ordinary skill in the art.

13. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kazmar ('518) or Flanagan et al ('538).

The claimed combined length of the drivers being "between 70 and 90 percent" of the longitudinal length of the shell segment, although not expressly disclosed in Kazmar or Flanagan et al, it however, a matter of design choice that one of ordinary skill in this art would find obvious.

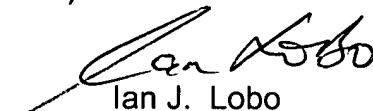
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14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ian J. Lobo whose telephone number is (571) 272-6974.

The examiner can normally be reached on Monday - Friday, 6:30 - 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas H. Tarcza can be reached on (571) 272-6979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Ian J. Lobo  
Primary Examiner  
Art Unit 3662

ijl